

ABSTRACT

Disclosed herein is a redundant network and communication protocol at least including host computers, RF base stations, and roaming terminals. The network may utilize a polling communication protocol such that under heavy traffic conditions, a roaming terminal wishing to initiate communication may be required to determine whether the channel is clear by listening for an entire interpoll gap time. When a hidden terminal is communicating, the roaming terminal may conclude that the communication is taking place upon receiving a polling frame directed to the hidden terminal from the normally silent base station. Inherent redundancy techniques may be used with a spanning tree approach for determining the most efficient pathways from a source to a destination and ensuring that the network adapts to spatial changes or breakdowns within the network.